BIBLIOGRAPHY OF SOVIET LASER DEVELOPMENTS

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No. 8, April-June 1972

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Advanced Research Projects Agency

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August 25, 1972

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Program Code No: 62701D2F10
Name of Contractor:
Informatics Inc.
Effective Date of Contract:
January 3, 1972
Contract Expiration Date:
December 31, 1972
Amount of Contract: $250,000

Contract No. F44620-72-C-0053
Principal Investigator:
Stuart G. Hibben
Tel: (301) 779-2850 or
(301) 770-3000
Short Title of Work:
"Soviet Lasers"

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Introduction

This bibliography has been compiled by the staff of Informatics Inc. in response to a continuing contractual assignment to monitor current Soviet-bloc developments in the quantum electronics field. Of all material reviewed, the major yield has been from the approximately 30 periodicals which are known to report the most advanced and interesting findings in Soviet laser technology.

The period covered is the second quarter of 1972, and includes all significant laser-related articles received by us during that interval. The structure and selection criteria are basically those used in the preceding reports.

For convenience we have abbreviated frequently cited source names; a source abbreviation list and an author index are included. Unless indicated by a parenthesized (RZh, LZhS) notation, all cited sources are available at Informatics Inc.

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643. Kondratenkov, G. S. Obrabotka informatsii kogerentnymi optich-eskimi sistemami (Information processing by coherent optical systems). Moskva, Sovetskoye radio, 1972, 206 p. (KL , 17/72, #14476)

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651. Skobel'tsyn, D. V., ed. Issledovaniya po nelineynoy optike i giperakustike (Studies on nonlinear optics and hyperacoustics). AN SSSR. Fizicheskiy institut. Trudy, no. 58, 1972, 167 p. (KL, 21-72, #17787)

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662. Zakharov, V. M., and O. K. Kostko. Lazery i meteorologiya (Lasers and meteorology). Leningrad, Gidrometeoizdat, 1972, 60 p.

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IV. SOURCE ABBREVIATIONS

APP	-	Acta physica polonica
DAN SSSR	-	Akademiya nauk SSSR. Doklady
DBAN	-	Bulgarska akademiya na naukite. Doklady
FAiO	-	Akademiya nauk SSSR. Izvestiya. Fizika atmosfery i okeana
FGiV	-	Fizika goreniya i vzryva
FiKhOM	-	Fizika i khimiya obrabotka materialov
F-KhMM	-	Fiziko-khimicheskaya mekhanika materialov
FMM	-	Fizika metallov i metallovedeniye
FTP	-	Fizika i tekhnika poluprovodnikov
FTT	-	Fizika tverdogo tela
IAN B	-	Akademiya nauk Belorusskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk
IAN Est	-	Akademiya nauk Estonskoy SSR. Izvestiya. Fizika-matematika
IAN Fiz	-	Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya
IAN Lat SSR. Seriya fizicheskikh i tekhnicheskikh nauk	-	Akademiya Latviyskoy SSR. Izvestiya. Seriya fizicheskikh i tekhnicheskikh nauk
IAN TadzhSSR. Otd. fiz-mat i geol-khim nauk	-	Akademiya nauk Tadzhikskoy SSR. Izvestiya. Otdeleniye fiziko-matematicheskikh i geologo-khimicheskikh nauk
IAN UzSSR. Seriya fiziko-matematicheskikh nauk	-	Akademiya nauk Uzbekskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk

I-FZh	-	Inzhenerno-fizicheskiy zhurnal
ILEI	-	Leningradskiy elektrotekhnicheskiy institut. Izvestiya
IT	-	Izmeritel'naya tekhnika
IVUZ Fiz	-	Izvestiya vysshikh uchebnykh zavedeniy. Fizika
IVUZ Geod	-	Izvestiya vysshikh uchebnykh zavedeniy. Geodeziya i aerofotos"yemka
IVUZ Priboro	-	Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye
IVUZ Radioelektr	-	Izvestiya vysshikh uchebnykh zavedeniy. Radioelektronika
IVUZ Radiofiz	-	Izvestiya vysshikh uchebnykh zavedeniy. Radiofizika
KhVE	-	Khimiya vysokikh energiy
KL	-	Knizhnaya letopis'
Kristal	-	Kristallografiya
KSpF	-	Kratkiye soobshcheniya po fizike
LZhS	-	Letopis' zhurnal'nykh statey
MZhiG	-	Akademiya nauk SSSR. Izvestiya. Mekhanika zhidkosti i gaza
NM	-	Akademiya nauk SSSR. Izvestiya. Neorganicheskiye materialy
OiS	-	Optika i spektroskopiya
OMP	-	Optiko-mekhanicheskaya promyshlennost'
Otkr izobr	-	Otkrytiya, izobreteniya, promyshlennyye obraztsy, tovarnyye znaki
PF	-	Postepy fizyki
Phys abstr	-	Physics abstracts
PSS	-	Physica status solidi

PTE	-	Pribory i tekhnika eksperimenta
RiE	-	Radiotekhnika i elektronika
RZhAvtom	-	Referativnyy zhurnal. Avtomatika, telemekhanika i vychislitel'naya tekhnika
RZhElektr	-	Referativnyy zhurnal. Elektronika i yeye primeneniye
RZhF	-	Referativnyy zhurnal. Fizika
RZhGeod	-	Referativnyy zhurnal. Geodeziya i aeros''yemka
RZhKh	-	Referativnyy zhurnal. Khimiya
RZhMekh	-	Referativnyy zhurnal. Mekhanika
RZhMetrolog	-	Referativnyy zhurnal. Metrologiya i izmeritel'naya tekhnika
RZhRadiot	-	Referativnyy zhurnal. Radiotekhnika
Sb1	-	Kvantovaya elektronika (Moscow), no. 7, 1972
Sb2	-	Uchennyye zapiski Ural'skogo universiteta, 1971, no.118, seriya Fiz., no. 7
Sb3	-	Godishn. vissh. tekhn. uchebni zaved. Fiz., v. 5, no. 2, 1968 (1970) Bulgarian
Sb4	-	Elektronnaya tekhnika. Nauchno-tekhnicheskiy sbornik. Poluprovodnikovyye pribory, no. 4 (61), 1971
Sb5	-	Fizika poluprovodnikov i poluprovodnikovaya elektronika, no. 3, 1970
Sb6	-	Elektronnaya tekhnika. Nauchno-tekhnicheskiy sbornik. Gazorazryadnyye pribory, no. 3 (23), 1971
Sb7	-	Sbornik. Poluprovodnikovyye pribory v tekhnike elektrosvyazi, no. 9, Moskva, Svyaz', 1972

Sb8	-	Sbornik. Ispol'zovaniye opticheskikh kvantovykh generatorov v sovremennoy tekhnike i meditsine, part 2-3, Leningrad, 1971
Sb9	-	Sbornik. Slozhnyye poluprovodniki i ikh fizicheskogo svoystva. Kishinev, Shtiintsa, 1971
Sb10	-	Godishn. vissh. tekhn. uchebni zaved. Fiz., v. 5, no. 1, 1968 (1970) Bulgarian
Sb11	-	Sbornik. Primeneniye ul'traakustiki k issledovaniyam veshchestva, no. 25, Moskva, 1971
Sb12	-	Sbornik. Metod radiatsionnykh vozdeystviy v issledovaniyakh struktury i svoystv tverdykh tel, Tashkent, Fan, 1971
Sb13	-	Sbornik. Fiziko-khimichesk. probl. kristallizatsiya, no. 2, Alma-Ata, 1971
Sb14	-	Uchennyye zapiski. Gor'kovskiy universitet. Seriya fiz., no. 126, 1971
Sb15	-	Uchennyye zapiski Dal'nevostochnogo universiteta, no. 51, 1970
Sb16	-	Matematicheskiye modeli biologicheskikh sistem, Moskva, Nauka
Sb17	-	Sbornik. Radioelektronika opticheskogo diapazona, Moskva, 1970 (1971)
Sb18	-	Sbornik. Materialy Nauchno-tekhnicheskoy konferentsiy Leningradskogo elektrotekhnicheskogo institutasvyazi, Leningrad, 1971
Sb19	-	Sbornik. Proyektirovaniye, no. 4, Moskva, 1972
Sb20	-	Sbornik. Materialy 2-y Vsesoyuznoy shkoly po gologrefii, 1970, Leningrad, 1971
Sb21	-	Sbornik. Materialy 1-y Vsesoyuznoy shkoly po gologrefii, Leningrad, 1971
Sb22	-	Sbornik. Novoye v tekhnike poluprovodnikovogo proizvodstva, Voronezh, Voronezhskiy universitet, 1971

Sb23	-	Fluid dynam. trans., v. 6, part 2. Proceedings of the 10th Symposium Adv. Probl. and Meth. in Fluid Mech., Pynia, 1971. Warszawa, 1971
Sb24	-	Sbornik. Nekotoryye aktual'nyye problemy radiotekhnicheskikh izmereniy, Moskva, Izd-vo Standartov, 1971
Sb25	-	Sbornik. Metrologiya v radioelektronike. Moskva, 1971
Sb26	-	Sbornik. Fizika vibratsionnogo goreniya i metody yeye issledovaniya, no. 1, Cheboksary, 1971
Sb27	-	Sbornik. Fizika tverdogo tela i termodinamika, Novosibirsk, Nauka, 1971
Sb28	-	Stankostroyeniye Litvy, no. 2, 1970
Sb29	-	Sbornik. Obmen opytom v radiopromyshlennosti, no. 2, Moskva, 1972
Sb30	-	Sbornik. Nekotoryye voprosy diffuzii rastvoreniya veshchestv v porakh sorbentov, Krasnodar, 1971
Sb31	-	Kozp. fiz. kut. intez., no. 72, 1971
SovSciRev	-	Soviet science review
TKiT	-	Tekhnika kino i televideniya
Tr1	-	Nauchnyye trudy Kubanskogo universiteta, no. 141, 1971
Tr2	-	Sbornik trudov Voronezhskogo politekhnicheskogo instituta, no. 4, 1971
Tr3	-	Trudy Sibirskogo nauchno-issledovatel'skogo instituta metrologii, no. 9, 1971
Tr4	-	Trudy Fizicheskogo instituta AN SSSR, no. 56, 1971
Tr5	-	Sbornik trudov Voronezhskogo politekhnicheskogo instituta, no. 2, 1969
Tr6	-	Trudy Moskovskogo energeticheskogo instituta, no. 94, 1971

Tr7	-	Sbornik trudov Voronezhskogo politekhnicheskogo instituta, no. 3, 1970
Tr8	-	Sbornik nauchnykh trudov Tsentral'nogo nauchno-issledovatel'skogo instituta svyazi, no. 1, 1971
Tr9	-	Trudy Fizicheskogo instituta AN SSSR, no. 58, 1972
Tr10	-	Trudy Severno-Zapadnogo zaochnogo politekhnicheskogo instituta, no. 14, 1971
Tr11	-	Trudy Moskovskogo vysshego tekhnicheskogo uchilishcha, no. 143, 1971
Tr12	-	Trudy uchebnykh institutov svyazi. Ministerstvo svyazi SSSR, no. 55, 1971
Tr13	-	Trudy uchebnykh institutov svyazi. Ministerstvo svyazi SSSR, no. 53, 1971
Tr14	-	Trudy VNII fiziko-tekhnicheskikh i radiotekhnicheskikh izmereniy, no. 3 (33), 1970
Tr15	-	Prace instytut masz. przepl. PAN, no. 54-55, 1971
Tr16	-	Trudy Metrologicheskikh institutov SSSR, 1972
Tr17	-	Trudy Instituta eksperimental'noy meteorologii, no. 30, 1972
Tr18	-	Trudy Kalininskogo politekhnicheskogo instituta, no. 9, 1971
TVT	-	Teplofizika vysokikh temperatur
UFN	-	Uspekhi fizicheskikh nauk
UFZh	-	Ukrainskiy fizicheskiy zhurnal
VAN	-	Akademiya nauk SSSR. Vestnik
VLU	-	Leningradskiy universitet. Vestnik. Fizika, khimiya
VMU	-	Moskovskiy universitet. Vestnik. Seriya fizika, astronomiya

ZhETF	-	Zhurnal ekperimental'noy i teoreticheskoy fiziki
ZhETF P	-	Pis'ma v Zhurnal eksperimental'noy i teoreticheskoy fiziki
ZhNiPFiK	-	Zhurnal nauchnoy i prikladnoy fotografii i kinomatografii
ZhNKh	-	Zhurnal neorganicheskoy khimii
ZhPMTF	-	Zhurnal prikladnoy mekhaniki i teoreticheskoy fiziki
ZhPS	-	Zhurnal prikladnoy spektroskopii
ZhTF	-	Zhurnal tekhnicheskoy fiziki
ZhVMMF	-	Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki

V. AUTHOR INDEX

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